AMENDMENT UNDER 37 C.F.R. § 1.114(c) Attorney Docket No.: Q78084

Appln. No.: 10/575,625

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

- 1. (currently amended): A Group III nitride semiconductor element comprising a substrate:
- a first nitride semiconductor layer composed of AlN single crystal having a thickness of .005 to .5 μ m which is provided on the substrate;
- a second nitride semiconductor layer composed of $Al_{x1}Ga_{1-x1}N(0 \le x \le 0.05)$ which is provided on the first nitride semiconductor layer;
- $\label{eq:and-a} \begin{array}{l} \text{and-a third nitride semiconductor layer composed of } Al_{x2}Ga_{1-x2}N \; (x1+0.02 \leq x2 \leq 0.5) \\ \text{which is provided on the second nitride semiconductor layer; } \underline{\text{and}} \end{array}$
- a fourth nitride semiconductor layer which is provided on the third nitride semiconductor layer, the fourth nitride semiconductor layer including:
 - an n-type contact layer composed of $Al_aGa_{1-a}N$ (0 < a < 1),
 - an n-type cladding layer composed of $Al_bGa_{1-b}N$ ($0 \le b \le 0.4$) which is provided on the n-type contact layer, and
 - a light-emitting layer which has a multiple quantum well (MQW) structure including a well layer composed of $Ga_{1:a}ln_sN$ ($0 \le s \le 0.1$) and a barrier layer composed of $Al_sGa_{1:s}N_s(0 \le c \le 0.3$ and $c \le b$) doped with Si_s , and is provided on the n-type cladding layer.
- (original): A Group III nitride semiconductor element according to claim 1, wherein said substrate is selected from a group consisting of sapphire single crystal, Si single crystal, SiC single crystal, AlN single crystal, and GaN single crystal.
- 3. (previously presented): A Group III nitride semiconductor element according to claim 1, wherein said second nitride semiconductor layer is formed of an island-like structure in which crystals of different heights are arranged so as to be separated from one another.

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4. (previously presented): A Group III nitride semiconductor element according to claim 3, wherein the Al content of said second nitride semiconductor layer differs from region to region of the island-like structure.

5. (canceled).

(previously presented): A Group III nitride semiconductor element according to claim
 wherein said second nitride semiconductor layer is composed of Al_{x1}Ga_{1,x1}N(0<x1≤0.02).

7. (previously presented): A Group III nitride semiconductor element according to claim

1, wherein said second nitride semiconductor laver has a thickness of 1 to 500 nm.

 (original): A Group III nitride semiconductor element according to claim 7, wherein said second nitride semiconductor layer has a thickness of 1 to 400 nm.

 (original): A Group III nitride semiconductor element according to claim 8, wherein said second nitride semiconductor layer has a thickness of 1 to 300 nm.

10. (previously presented): A Group III nitride semiconductor element according to claim 1, wherein said second nitride semiconductor layer is composed of an undoped semiconductor.

 (currently amended): A Group III nitride semiconductor light-emitting device comprising a Group III nitride semiconductor element according to claim 1,÷a wherein;

the fourth nitride semiconductor layer <u>further includes a p-type layer provided</u> on said third nitride semiconductor layer of said semiconductor element, said fourth nitride semiconductor layer including an n-type layer, a light-emitting layer, and a p-type layer, which are successively formed atop-said third nitride semiconductor layer in this order; a light-emitting layer,

a negative electrode provided on said n-type contact layer; and

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a positive electrode provided on said p-type layer.

 (original): A light-emitting diode comprising a Group III nitride semiconductor lightemitting device according to claim 11.

- (original): A laser diode comprising a Group III nitride semiconductor light-emitting device according to claim 11.
- (previously presented): A semiconductor device comprising a Group III nitride semiconductor element according to claim 1.
 - 15. (canceled).
- 16. (previously presented): A Group III nitride semiconductor element according to claim 4, wherein the second nitride semiconductor layer has a region having a lower Al content at a position closer to the substrate and a higher Al content at a position farther from the substrate.